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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,508	03/11/2004	Peter W. Farrett	CHA920030027US1	6406

23550	7590	06/27/2006

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EXAMINER
RAAB, CHRISTOPHER J

ART UNIT	PAPER NUMBER
2631	

DATE MAILED: 06/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _11 March 2004_.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-15_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-15_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _11 March 2004_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _03/11/2004_.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

01.   The information disclosure statement (IDS) filed on **03/11/2004** has been considered by the

examiner and made of record in the application file.

Drawings

02.   The drawings were received on **03/11/2004**. These drawings are accepted.

Claim Rejections – 35 USC § 102

03.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for

the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the
United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by
another filed in the United States before the invention by the applicant for patent, except that an international application
filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed
in the United States only if the international application designated the United States and was published under Article
21(2) of such treaty in the English language.

04.   **Claims 6, 8, and 10** are rejected under 35 U.S.C. 102(e) as being anticipated by **Pak et al. (U.S.**

PGPub # 2004/0260534).

Consider **claim 6**, Pak et al. clearly show a system comprising steps of: searching a variety of

types of documents (read as searching a knowledge base) (paragraph [0036]) for material related to

concepts (read as to find a match answer and an alternative answer for a search term) (paragraph

[0036]), providing a list of categories (read as performs a first search and a second search at a first and

second location in the knowledge base) (paragraphs [0027] – [0028]), providing search results including

materials in the selected category (read as returns a match answer) (paragraphs [0027] – [0028]),

providing a response including materials in the selected category, and storing information about a

combination of the selected category and a representation of the text in a knowledge base (read as a

table update system that updates the alternative answer probability table based on a table of previously

determined category answer associations) (paragraphs [0047] – [0048]).

Consider **claim 8**, and **as applied to claim 6 above**, Pak et al. clearly show a system wherein

feedback is used to modify the base model to add to the set of acceptable combinations to intelligently

provide documents from the knowledge base in these categories, both automatically and with the

assistance of a customer service agent (read as the look-up association is determined from a search

history) (paragraphs [0036], [0047] - [0048]).

Consider **claim 10**, and **as applied to claim 6 above**, Pak et al. clearly show a system wherein

the invention analyzes the natural language text (read as a natural language parser for receiving natural

commands) (paragraph [0036]) to determine an underlying concept (read as generating the search term.)

(paragraph [0036]).

Claim Rejections - 35 USC § 103

05.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102
> of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art
> to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was
> made.

06.   The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966),

that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are

summarized as follows:

> 1.   Determining the scope and contents of the prior art.
> 2.   Ascertaining the differences between the prior art and the claims at issue.
> 3.   Resolving the level of ordinary skill in the pertinent art.
> 4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

07.   **Claims 1 – 5, 7, 9, 11 – 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Pak**

et al. (U.S. PGPub # 2004/0260534) in view of **Chaudhuri (U.S. PGPub # 2003/0018615)**

Consider **claim 1**, Pak et al. clearly show a method for searching a variety of types of documents (read as searching a knowledge base having a plurality of answer objects) (abstract, paragraph [0019]) comprising steps of:

obtaining natural language text from queries generated within an application program as well as from external message sources (read as inputting a search term) (paragraphs [0039] – [0040])

analyzing natural language text to identify a set of categories of data in a knowledge base (read as determining a match answer category from the match answer) (paragraph [0020])

analyzing the natural language text to determine an underlying concept (read as determining a look-up association based on the match answer category and a search history) (paragraph [0019])

identifying one or more categories of searchable material in a knowledge base that are related to the underlying concept (read as plugging the look-up association into an alternative answer probability table to identify an alternative answer category) (paragraph [0019]).

providing documents from the knowledge base in these categories, both automatically and with the assistance of a customer service agent (read as performing a secondary search to find the alternative answer that belongs to the alternative answer category) (paragraph [0019]).

However, Pak et al. does not specifically disclose searching randomly in the database for multiple match answers.

Chaudhuri et al. show a method of searching such that if the sampling of a relation is unweighted, than each element is sampled uniformly at random. The search can obtain one record from a plurality of records, selectively output the one record one or more times based on probability, and repeat these steps for one or more other records of the plurality of records to obtain the sample (read as beginning a (second) search at a (second) random location in the knowledge base to identify the (alternative) match answer (paragraph [0022], [0028], [0034]).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the random searching taught by Chaudhuri et al. into the category determination and association taught by Pak et al. for the purpose of determining different possible alternative answer categories.

Consider **claim 2**, and **as applied to claim 1 above**, Pak et al. also show a method which

provides search results including materials in the selected category and storing information about a

combination of the selected category and a representation of the text in a knowledge base (read as the

match answer category and alternative match answer category form a category answer association, and

the search history comprises a table of previously determined category answer associations) (paragraph

[0027]).

Consider **claim 3**, and **as applied to claim 2 above**, Pak et al. also show a method in that

learning can be applied for categories based on actual usages of the knowledge base (read as the

alternative answer probability table is determined from the search history table) (paragraph [0048]).

Consider **claim 4**, and **as applied to claim 3 above**, Pak et al. also show a method to search a

variety of types of documents for material related to concepts expressed in natural language text (read as

the search term is extracted from a natural language input) (paragraph [0019], [0039]).

Consider **claim 5**, and **as applied to claim 4 above**, Pak et al. also show a method such that the

data in the knowledge base can include solutions, resolutions, and pre-defined answer (read as the

match answer and alternative answer are presented in natural language format (paragraph [0021]).

Consider **claim 7** and **as applied to claim 6 above**, Pak et al. clearly show the claimed invention

except that the locations of searching are determined randomly.

Chaudhuri et al. show a method of searching such that if the sampling of a relation is unweighted,

then each element is sampled uniformly at random. The search can obtain one record from a plurality of

records, selectively output the one record one or more times based on probability, and repeat these steps

for one or more other records of the plurality of records to obtain the sample (read as the first and second

locations are determined randomly (paragraph [0022], [0028], [0034]).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the random searching taught by Chaudhuri et al. into the search system taught by

Pak et al. for the purpose of determining different possible alternative answer category associations.

Consider **claim 9**, and **as applied to claim 7** above, Pak et al. in view of Chaudhuri et al. clearly show the claimed invention except that each previously determined category answer association comprises a match answer category and an alternative answer category.

Pak et al. show a method that provides storing information about a combination of the selected category and a representation of the text in a knowledge base (read as each previously determined category answer association comprises a match answer category and an alternative answer category) (paragraph [0027]).

Therefore it would have been obvious to one of ordinary art in the skill at the time the invention was made to incorporate the answer category association taught by Pak et al. into the search system taught by Pak et al. in view of Chaudhuri et al. for the purpose of storing information about the association between different categories.

Consider **claim 11**, Pak et al. clearly show a program product for searching a variety of types of documents (read as a product stored on a recordable medium for searching a knowledge base for a match answer and an alternative answer) (abstract, paragraph [0019]) comprising steps of:

obtaining natural language text from queries generated within an application program as well as from external message sources (read as inputting a search term) (paragraphs [0039] – [0040])

analyzing natural language text to identify a set of categories of data in a knowledge base (read as determining a match answer category from the match answer) (paragraph [0020])

analyzing the natural language text to determine an underlying concept (read as determining a look-up association based on the match answer category and a search history) (paragraph [0019])

identifying one or more categories of searchable material in a knowledge base that are related to the underlying concept (read as plugging the look-up association into an alternative answer probability table to identify an alternative answer category) (paragraph [0019]).

providing documents from the knowledge base in these categories, both automatically and with the assistance of a customer service agent (read as performing a secondary search to find the alternative answer that belongs to the alternative answer category).

However, Pak et al. does not specifically disclose searching randomly in the database for multiple match answers.

Chaudhuri et al. show a program product such that if the sampling of a relation is unweighted, than each element is sampled uniformly at random. The search can obtain one record from a plurality of records, selectively output the one record one or more times based on probability, and repeat these steps for one or more other records of the plurality of records to obtain the sample (read as beginning a (second) search at a (second) random location in the knowledge based to identify the (alternative) match answer (paragraph [0022], [0028], [0034]).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the random searching taught by Chaudhuri et al. into the category determination and association taught by Pak et al. for the purpose of determining different possible alternative answer categories.

Consider **claim 12**, and **as applied to claim 11 above**, Pak et al. also show a program product which provides search results including materials in the selected category and storing information about a combination of the selected category and a representation of the text in a knowledge base (read as the match answer category and alternative match answer category form a category answer association, and the search history comprises a table of previously determined category answer associations) (paragraph [0027]).

Consider **claim 13**, and **as applied to claim 11 above**, Pak et al. also show a program product in that learning can be applied for categories based on actual usages of the knowledge base (read as the alternative answer probability table is determined from the search history table) (paragraph [0048]).

Consider **claim 14**, and **as applied to claim 11 above**, Pak et al. also show a program product to search a variety of types of documents for material related to concepts expressed in natural language text (read as the search term is extracted from a natural language input) (paragraph [0019], [0039]).

Consider **claim 15**, and **as applied to claim 11 above**, Pak et al. also show a program product such that the data in the knowledge base can include solutions, resolutions, and pre-defined answer

(read as the match answer and alternative answer are presented in natural language format (paragraph

[0021]).

Conclusion

08.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Kobayashi et al., PGPub 2004/0002964,

b) Gustafson, U.S.Pat 5,659,731

c) Kuhlmann et al., PGPub # 2004/0167897

d) Talib et al., PGPub 2001/0049677

e) Ford et al, U.S. Pat 6,963,867

f) Aono et al., PGPub 2004/0162834

g) Hass et al., U.S. Pat 6,993,516

h) Rautenbach et al., PGPub 2002/0165848

09.   Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

10.   Any inquiry concerning this communication or earlier communications from the Examiner should

be directed to Christopher Raab whose telephone number is (571) 270-1090. The Examiner can normally

be reached on Monday-Thursday from 7:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor,

Rafael Pérez-Gutiérrez can be reached on (571) 272-7915. The fax phone number for the organization

where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC)

at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be

directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Christopher Raab
C.R./cr

June 06, 2006

EDAN ORGAD
PATENT EXAMINER/TELECOMM.